

Museum
of
Contemporary
Art



isea97
Chicago

Friday
September 26
1997

8th

International
Symposium on Electronic
Art (ISEA97)

isea97
Chicago

James Dashow

First Tangent to the Given Curve
for piano and computer-synthesized
sound
Paul Hoffmann, piano

Silvia Matheus

Joan is Back . . .
for live interactive computer synthesis
Mark Goldstein, performer

Robert Normandeau

Le renard et la rose
for 8-channel computer-synthesized
sound

Craig Harris

Time Travel
for violin, alto flute, and processed
sound Gary Schulte, violin; Candy
Kuehn, alto flute; Craig Harris, sampler

intermission

The Eighth International Symposium on Electronic Art (ISEA97) begins Monday, September 22 and runs through Saturday, September 27. ISEA97 is hosted by The School of The Art Institute of Chicago in conjunction with the Inter-Society for the Electronic Arts, an organization that initiated this series of symposia in 1988 to support an international network of groups and individuals in the field of electronic art. Past ISEA conferences have been presented in Rotterdam, Montreal, Helsinki, Minneapolis, Sydney, Groningen, and Utrecht, Holland.

The School of The Art Institute of Chicago gratefully acknowledges the following sponsors for their generous support of ISEA97: MacLean-Frogg Company, Molex Incorporated, Neoglyphics Media Corporation, Goethe-Institut Chicago, Graham Foundation for Advanced Studies in the Fine Arts, and LOT Polish Airlines. For more information about locations, related events, exhibitions, and conference registration:

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Martin, "Jefferson";
David Rosenboom, "Double 1" &
"Double 2," narration, computer media

Performance programs at the MCA are generously supported in part by gifts from Prince Charitable Trust to the Chicago Contemporary Campaign and by a major grant from The John D. and Catherine T. MacArthur Foundation. Additional support has been provided by Hope A. Abelson and Shure Brothers Incorporated. Outreach to new audiences for the MCA's Performing Artists in Residence Program is supported by a grant from the Joyce Foundation.

The Museum of Contemporary Art is a nonprofit, tax-exempt organization. The MCA's exhibitions, programming, and operations are member supported and privately funded through contributions from individuals, corporations, and foundations.

Additional support is provided through the Illinois Arts Council, a state agency, and a City Arts IV grant from the City of Chicago Department of Cultural Affairs. Air transportation services are provided by American Airlines, the official airline of the Museum of Contemporary Art.

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James Dashow

First Tangent to the Given Curve

For piano and computer

Performed by Paul Hoffman, piano

The more time passes, the more I am fascinated with putting together musical ideas that are on the surface seemingly unrelated in order to see how they affect and transform each other, how their interactions generate form building energies. The tensions from their contrasts, the rhythms within each event, how each idea unfolds and develops, the rhythms with which the events succeed or interrupt each other . . . all these elements form the dynamic of my work. They are ensembles of things that generate a world of complexities, intertwining, symmetries and asymmetries, turbulence, provocations, moods, much like the multifarious life experiences—both day to day and in the long run. The result is a unique form, a completed blend, rather like a reflection of a series (a collection) of events in life that you perceive as a local whole. A pluralistic universe in the best Jamesian tradition.

The relationship between the piano and the computer-generated electronic sounds is, on the other hand, rigorously worked out with extreme precision. The pitch structure provides the basis for the sounds, or vice versa a certain kind of sound yields the basis for the intervals and their specific pitches. And they too mutually influence each other. A continuous cooperative, "a due."

The electronic sounds were generated entirely by the composer's MUSIC30 program for digital sound synthesis running on the Spirit30 accelerator board for PC, by Sonitech Int'l (Wellesley, MA).

The title of the work comes from an essay by Michel Serres, which captures rather nicely the sense of the music, the sense of the composition.

"Here is the complement of the model. Given a flow of atoms, by the declination, the first tangent to the given curve, and afterward by the vortex, a relatively stable thing is constituted. It stays in disequilibrium, ready to break, then to die and disappear but nonetheless resistant by its established conjunctions, between the torrential flow from the upstream currents and the river flowing downstream to the sea. It is a stationary turbulence."

—Michel Serres, on *Lucretius*

First Tangent to the Given Curve has been recorded by Daniele Roi on a Capstone CD.

James Dashow (Italy/U.S.)

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James Dashow, born 1944 in Chicago, studied at Princeton and Brandeis Universities, and completed his musical training with Petrassi at the Accademia Nazionale di Santa Cecilia, Rome. He is now director of the Studio di Musica Elettronica Sciadoni. He has been associated as composer and teacher with the Centro di Sonologia Computazionale of the University of Padua. Dashow served for several years as the first vice president of the International Computer Music Association. Dashow has been the recipient of numerous prizes, such as a Fulbright fellowship to Rome, first prize at the V Concours International di Musique Electroacoustique, Bourges (France), two National Endowment for the Arts grants for works with soloist and computer-generated electronic accompaniment, two commissions from the Venice Biennale, a Rockefeller Foundation grant, the American Academy and Institute of Arts and Letters prize, a grant from the Guggenheim Foundation, and commissions from the Fromm Foundation and the Koussevitzky Foundation. His radio piece, *MEDIA SURVIVAL KIT* (1995–96), a "lyric satire" on texts by Bruno Ballardini, was commissioned by the classical music channel, Radio3, of the RAI, and was awarded the Prize of Distinction at the 1996 Ars Electronica Festival in Linz, Austria. Dashow has been invited to present solo concerts of his work for acoustic and electronic instruments at major

new music festivals and in conjunction with European national radio networks. He has lectured extensively in the U.S. and in Europe, has been acting director of the MIT

Experimental Music Studio while teaching the Studio's graduate music seminar, and has also taught composition courses at Princeton University. Most recently Dashow conducted a series of seminars in digital sound for the Centro para la Difusión de la Música Contemporánea in Madrid.

Paul Hoffmann (U.S.)

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Paul Hoffmann, pianist and conductor, made his debut at the Vienna Konzerthaus in 1973 while on a Fulbright grant, and has since given concerts extensively in the U.S. and abroad. He is founder and director of HELIX! New Music Ensemble of Rutgers University, which is in its eighth season of concerts. He performs frequently with Tom Goldstein, percussionist, in their duo, the Hoffmann/Goldstein Duo. He has recorded solo and chamber music for Orion, CRI, Northeastern, Composers Guild of New Jersey, Contemporary Record Society, O.O. Discs, Spectrum, and Vienna Modern Masters labels and has made numerous radio broadcasts in the U.S., as well as for Voice of America, Radio Cologne, Radio Frankfurt, and Radio France. He is presently working on recordings for Capstone, O.O. Discs and New World Records.

Mr. Hoffmann holds degrees from Eastman School of Music, and also studied at the Peabody Conservatory. He attended both the Salzburg "Mozarteum" and the Hochschule für Musik in Vienna. His principal teachers have been Leon Fleisher, Cecile Genhart, Dieter Weber, Kurt Neumuller, and Brooks Smith. He is currently Professor of Music at Mason Gross School of the Arts, Rutgers University, where he teaches piano and chamber music, and directs the contemporary music ensemble, HELIX!, which he founded in 1990.



Silvia Matheus & Mark Goldstein

Joan is Back...

For live interactive computer synthesis performed by Mark Goldstein

Joan is Back... is an interactive composition for computer, processed sounds, and synthesizers. The work was realized at CNMAT (U.C. Berkeley Center for New Music and Audio Technologies) and Ms. Matheus's private studio. It explores timbral space, visual space, and gesture using the *Lightning II* alternative MIDI controller designed by Don Buchla. The structure consists of multiple layers: a through-composed stratum and a collection of themes whose ultimate order is determined in real time by the performers' gestures in space with the lightning wands. The score is written in the MAX programming language for Macintosh.

Silvia Matheus (U.S./Brazil)

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Silvia A. Matheus holds a BA in Music from de Academia Paulista de Música, Brazil, and an MFA in Electronic Music and Recording Media from Mills College, Oakland, CA. Ms. Matheus's main focus is interactive improvisation with computer and instrumental ensemble. Several of Ms. Matheus's electronic music pieces have been presented at the International Computer Music Conferences: Hong Kong (1996), Canada (1995), and Japan (1993); and International Computer Music Conference of Brazil (1996). Since 1991 she has been associated with CNMAT (Center for New Music and Audio Technologies) at University of California, Berkeley, where she presently works as an independent composer. Ms. Matheus is dedicated to interactive computer music and improvisation, and she has been involved as a composer and sound designer in theater, dance productions, and multimedia presentations in the Bay Area as well as Asia and Brazil.

Mark Goldstein (U.S.)

Mark Goldstein is a free-lance percussionist from the San Francisco Bay area. He holds a percussion degree from the Peabody Conservatory of Music and computer science degrees from The Johns Hopkins University and Stanford University. Mr. Goldstein performs in a wide variety of idioms in both the analog and digital domains. He is also a software developer specializing in audio and musical applications and has worked for the Center for New Music and Audio Technologies (U.C. Berkeley), the Center for Computer Research in Music and Acoustics (Stanford), Gibson Guitar G-WIZ Labs, and Studer Editech/Integrated Media Systems. Mr. Goldstein collaborates with composers and instrument builders and explores the relationship between sound and gesture, creating software, hardware, and repertoire for electronic and computer music instruments in live performance.

Robert Normandeau

Le renard et la rose

Concert suite composed from two sound sources: the music commissioned by Radio-Canada for the radio play adapted from *The Little Prince* by Antoine de Saint-Exupéry (produced by Odile Magnan in 1994), from which one will retrieve the main themes and the voices of the actors who have participated to the radio play.

Le renard et la rose is the third piece of a cycle undertaken in 1991 (*clats de voix* and *Spleen* were the first two parts of that cycle) based exclusively on the use of the voice and more particularly on the use of the onomatopoeia, considered as the only case in the human language where the sound describes directly the object, the gesture, or the feeling that one wants to communicate, opposed to its abstract representation, the word.

The work is divided into five sections that represent as many states of the adult age, associated with different sound parameters: chattering and rhythm; nostalgia and timbre; anger and dynamic; lassitude and space; and finally, serenity and texture. One will find successively various topics, characters, and themes of *The Little Prince*, such as the King, the Businessman, the Conceited Person, the Flock of Birds, the Desert Well, a Flower, the Rose, the Baobabs, the Lamplighter, the Water Pills Tradesman, the Fox, and the Geographer. The piece was awarded the Golden Nica (First Prize) at the Prix Ars Electronica 1996 (Linz, Austria).

Robert Normandeau (Canada)

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Mr. Normandeau was born March 11, 1955 in Québec City, Canada. He earned his MMus (1988) and DMus (1992) in Composition from Université de Montréal. He was a founding member of the Canadian Electroacoustic Community and has been awarded many prizes, including the Golden Nica at Prix Ars Electronica (1996). He has served as lecturer at the Music Faculty of the Université de Montréal since 1988. Specializing in acousmatic composition since 1984, his work adopts the perspective of a "cinema for the ear," where the meaning as well as the sound contributes to the composition.

Craig R. Harris

Time Travel

Performed by Candy Kuehn, alto flute, Gary Schulte, violin, and Craig Harris, sampler.

Time Travel is a composition for alto flute, violin, digital sampler, and sound effects processors. The alto flute provides the musical material that propels the work, employing a variety of brief motifs and sounds that have a timeless quality. The violin develops the flute's material, providing a contrast in both sonic quality and style. Sound from the instruments are recorded both prior to and during performance onto a digital sampler, and is transformed into multidimensional sound environments. The work incorporates a combination of notated and improvised content, blending the consistency of prescribed material with the vibrancy of improvisational and indeterminate elements. Candy Kuehn performs the alto flute, and the violin is played by Gary Schulte. Craig Harris performs the EIII digital sampler and sound processing.

Craig R. Harris (U.S.)

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Craig Harris is a composer, new media artist, performer, writer, and educator. His artwork includes works for concert performance, musical theater and performance art, dance, video, computer-based multimedia, and art installation. Harris is Executive Editor of the Leonardo/MIT Press WWW journal *Leonardo Electronic Almanac*. The focus of Harris's research is Configurable Space, a project that explores the creative process and the impact of new technology on the development of tools and environments

for creative activity. Harris's work has been presented at a variety of international events, including ISEA 1996, the 1996 Copenhagen Film Festival, the 1997

Society for Electroacoustic Music in the United States Conference, and the 1997 International Computer Music Conference. He is currently creating an electroacoustic recital work for opera singer Renée Fleming, under a grant from the American Composers Forum, the Jerome Foundation, and the Hanson Institute for American Music. He is editing a book documenting the Xerox PARC artist-in-residence program (PAIR), to be published by MIT Press in 1998 in the Leonardo Book Series. He received a PhD in Music Composition from the Eastman School of Music in 1986.

Candy Kuehn (U.S.)

Candy Kuehn is a visual artist whose work and techniques have a pre-industrial basis. Her music on the alto flute flows out of a spiritual and transcendent origin, using a musical storytelling style that illuminates vivid memories of previous lifetimes. She studied art, music, poetry, dance, and theater at The Evergreen State College in Olympia, Washington.

Gary Schulte (U.S.)

An acknowledged master of improvisation and unaccompanied violin, Gary Schulte is a graduate of Indiana University School of Music, where he studied with renowned virtuoso Ruggiero Ricci. Often performing outdoors in natural areas, at ancient sacred sites or in his tipi, Schulte insists that the listeners, the animals, the wind and trees, and even the stones, participate in the creation of his spontaneous compositions.

Howard Sandroff

Chants de femmes (1996)

Performed by Mary Stolper, flutes

Chants de femmes, for flutes and

computer-generated electronic sounds, was commissioned by flutist Mary Stolper and received its premiere in November 1996. Translated as "the songs of women," the work is in three movements that are performed without a pause. The first movement is for piccolo, the second for alto flute, and the third for "C" flute. A short coda for alto flute follows movement three. The electronic sounds were created on the computer using recorded flutes.

In June 1996, I was in Paris for a performance of my 1990 composition *Tephilla* at the Georges Pompidou Center. One afternoon, while loitering in the Stravinsky Plaza, right outside the Center, I suddenly found myself enveloped by a crowd of French women, probably from the provinces—they weren't speaking the Parisian French I was used to hearing. Everyone was talking, conversations overlapped, while one lone man, at the front, spoke in an authoritative manner, while pointing at the Pompidou Center. I finally figured it out! I was in the midst of a tour. Since I couldn't find the meaning in all of the spoken confusion, the women's voices became only sounds. Beautiful, somewhat confusing, but melodic sounds; high pitched, low pitched, with myriad articulations that hinted at some abstract organization. Later that evening I realized that right before my ears was Mary Stolper's piece. I couldn't wait to return home to begin.



Howard Sandroff (U.S.)

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Composer/sound artist Howard Sandroff is a pioneer in using computers and electronics for live musical performance. His compositions have been performed throughout the United States, Canada, Europe, and Japan and have been featured at numerous contemporary music festivals including New Music America, the Society of Composers, the Aspen Music Festival, New Music Chicago, the International Computer Music Conference, the Smithsonian Institute, the World Saxophone Congress in Japan and France, the International Clarinet Society in Quebec and Paris, Vermont New Music Ensemble, the Contemporary Chamber Players of the University of Chicago, Chicago Symphony Orchestra Chamber Music Series, the Musik Factory in Bergen, Norway, and many others. In June 1996, Sandroff was invited by Maestro Pierre Boulez to attend the dedication of the new I.R.C.A.M. facilities at the Georges Pompidou Center in Paris where Alain Damiens, soloist with the Ensemble Intercontemporain, performed Sandroff's 1990 composition, *Tephillah*, for clarinet and computer. Sandroff is currently Director of the Computer Music Studio and Senior Lecturer in Music at The University of Chicago and Artist-in-Residence with the Radio/Sound Department of Columbia College. Sandroff and Chicago Symphony clarinetist John Bruce Yeh began their collaboration in 1989 by realizing the computer controlled pre-recorded spatialization of *Dialogue de l'ombre double* by Pierre Boulez. Performing together as Double Dialogue, they have presented their program of works for clarinet and computer throughout the United States and abroad. Yeh and Sandroff have recorded *Tephillah* for a 1997 compact disc release from Koch International Classic.

Mary Stolper (U.S.)

Mary Stolper studied flute with Walfrid Kujala at Northwestern University. She gave her Carnegie Hall recital debut in 1982 and was a 1988 winner of the National Flute Association Chamber Music Competition as a member of the flute and harp duo Espree. In 1989 Ms. Stolper performed Nielsen's Flute Concerto throughout East Germany with the Chicago Chamber Orchestra to critical acclaim. She is assistant principle flute in the Grant Park Symphony, principle flute in the Chicago Sinfonietta, and a founding member of the Chicago Flute club. She has served on the boards of New Music Chicago, Chicago Society of Composers, American Women Composers, Musicians Club of Women, and on the artistic review panel of the Illinois Arts Council. Mary Stolper has recorded for the Capriccio, Centaur, MTS and Musical Heritage record labels as well as the Erato label, which has released a CD of flute music performed by Stolper. She teaches flute at the DePaul University School of Music and is much in demand as a soloist, orchestral, and chamber musician with ensembles throughout the Chicago Area.

Bruce Mahin

Galileo

For electronic wind instrument, interactive computer, and synthesizers
During his lifetime, Galileo's theories about the earth as a celestial body revolving around the sun put into question many of the doctrines supported at the time by the Catholic church. One such doctrine placed man as a divine creature living on an earth residing at the center of the universe. The suggestion that the earth might actually be one of many celestial bodies circling the sun put into question some of the "literal" explanations held by the church and, therefore resulted in the scientist taking severe admonitions from the papal powers.

The mathematician's struggle to stand firm in his beliefs lasted the whole of his life until he, under great duress, recanted the theories and promised to deny their validity in published works.

Using the life of Galileo as a point of inspiration, this work examines the nature of exploration and discovery as an exciting, often dangerous, enterprise. In this piece, the performer plays a written score, the computer follows along, makes musical decisions, and performs its own accompaniment using algorithms in real time. *Galileo* was composed while the composer worked at Glasgow University, Scotland on an honorary research fellowship in 1996.

Bruce Mahin (U.S.)

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Bruce Mahin has been Associate Professor of Music and Director of the Radford University Center for Music Technology since 1989. He has performed concerts throughout the United States and in Europe, most recently as a research fellow at Glasgow University, Scotland. His acoustic music is available on the Capstone label as *Shadows* (CPS-8611) and music for interactive computer and performer is available on *Time Chants* (CPS-8624). Mahin received degrees from West Virginia University, Northwestern University, and the Peabody Conservatory of The Johns Hopkins University.

David Rosenbloom

On Being Invisible II (Hypatia Speaks to Jefferson in a Dream)

For live interactive computer synthesis

A Self-Organizing, Multimedia Performance Work Utilizing Event-Related Potentials From Performers' Brains (1994-95)

Kymerli Olsen, "Hypatia" (brainwaves), Trevor Martin, "Jefferson" (brainwaves), David Rosenboom, "Double 1" & "Double 2" (musical parts), narration, computer media

Ideas about evolution appear as regular, thematic referents throughout much of my music. In the late 1960s, I became fascinated with how new developments in brain science might relate to musical perception and the spontaneous emergence of musical languages as can occur in skilled improvisation. This inspired musical works, research projects, and writings *On Being Invisible*, begun in 1976, is a self-organizing, dynamical system, rather than a fixed musical composition.

The title refers to the role of an individual within an evolving, dynamical environment, who makes decisions concerning when and how to be a conscious initiator of action and when simply to allow her or his internal dynamics to co-evolve with the system as a whole. I have recently returned to this piece, calling it, *On Being Invisible II*, partly because advances in technology now make it feasible to realize many concepts for performances that I could only write about before.

One of the objectives of the piece is to create an attention-dependent, sonic environment, in which a sound language orders itself spontaneously, according to the manner in which its components are perceived. To accomplish this, streams of sound events are generated by computers with pre-determined compositional methods. Using a partial model of musical perception, the software analyzes them and attempts to predict which ones might be perceived by active listeners as having particular importance in

the emerging musical structure. Then, signals from the brains of on-stage performers, known as event-related potentials (ERP's), are tested to determine if these predictions can be confirmed and the events are, in fact, being heard as musical landmarks. If so, these kinds of sound events will gain prominence in the musical fabric. If not, the music-generating algorithms will begin to mutate into new forms. In this way, self-organizing musical structures can emerge that are related to shifts of attention experienced by the performers. This is composition by listening. The evolving musical fabric exhibits characteristics of complex adaptive systems, often used to model the evolution of life forms.

The various parts of this feedback system remind me of characters in a mythological drama, the spontaneous forces of creativity, the drive to converge upon ordered relationships in society, the counterbalancing tension of divergence from order as we lose its focus on orderings from the past, and the fundamental uncertainties regarding nature's only partially knowable forces. Consequently, I began to think about it in narrative terms.

On Being Invisible II (Hypatia Speaks to Jefferson in a Dream) is an aesthetic proposition on these themes, self-organizing opera. The setting is a dream in which Thomas Jefferson hears the voice of the Greek, woman, astronomer, mathematician, and philosopher, Hypatia, traversing the centuries and continents and mingling with his own internal voices as he writes one of his later-to-be-famous, political statements.

David Rosenboom (U.S.)

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David Rosenboom (b. 1947), composer, performer, conductor, interdisciplinary artist, author, and educator, has explored ideas in his work about the spontaneous evolution of forms, languages for improvisation, new techniques and notation for ensembles, cross-cultural collaborations, performance art, computer music systems, interactive multimedia, compositional algorithms, and extended musical interface with the human nervous system since the 1960s. Known as a pioneer in American experimental music, Rosenboom has been Dean of the School of Music, Co-Director of the Center for Experiments in Art, Information and Technology, and Conductor of the New Century Players at the California Institute of the Arts since 1990. During the 1980s he was Darius Milhaud Professor, Head of the Music Department and Director of the Center for Contemporary Music at Mills College. He studied at the University of Illinois, where he was awarded the George A. Miller Professorship in 1995, and has worked in many innovative institutions, such as the Center for Creative and Performing Arts at SUNY Buffalo, New York's Electric Circus, York University in Toronto, New York University, Banff Center for the Arts, Simon Fraser University, Aesthetic Research Centre of Canada, San Francisco Art Institute, and California College of Arts and Crafts.

Trevor Martin is a writer, sculpture, and performer who is currently completing his MFA at The School of The Art Institute of Chicago.

Kymerli Olsen is a performer and community activist who received her MFA from The School of The Art Institute of Chicago.